

AMENDMENTS TO THE CLAIMS

1-8. (Canceled)

9. (New) A binding compound comprising an antigen binding site from a substantially pure or recombinant antibody, wherein the antibody specifically binds to a polypeptide comprising mature SEQ ID NO:20 or a fragment thereof.

10. (New) The binding compound of claim 9, wherein the binding compound blocks the interaction between OX2 and OX2R.

11. (New) The binding compound of claim 9, wherein the binding compound is a Fv, Fab, or Fab₂ fragment.

12. (New) The binding compound of claim 9, wherein the binding compound is conjugated to a chemical moiety.

13. (New) The binding compound of claim 9, wherein the attached to a solid substrate.

14. (New) The binding compound of claim 13, wherein the solid substrate is a bead or a plastic membrane.

15. (New) The binding compound of claim 9, wherein the binding compound binds the polypeptide of SEQ ID NO:20 or a fragment thereof, with a K_d of at least 30 μM.

16. (New) The binding compound of claim 9, wherein the polypeptide comprising mature SEQ ID NO:20 is a fusion protein.

17. (New) The binding compound of claim 9, wherein the binding compound is in a sterile composition.

18. (New) The binding compound of claim 9, wherein the binding compound is labeled with a detectable label.

19. (New) The binding compound of claim 18, wherein the label is a fluorescent label or a radioactive label.

20. (New) The binding compound of claim 9, wherein the binding compound binds the polypeptide comprising SEQ ID NO:20 or a fragment thereof when it is denatured.

21. (New) The binding compound of claim 9, wherein the antibody is a polyclonal antibody.

22. (New) The binding compound of claim 9, wherein the antibody is raised against a polypeptide comprising SEQ ID NO:20 or some fragment thereof.

23. (New) A kit comprising:

- a) the binding compound of claim 9;
- b) a compartment for the binding compound; and
- c) instructions for use or disposal of reagents in the kit.